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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 09:06:28 ON 28 APR 2006

FILE 'AGRICOLA' ENTERED AT 09:06:28 ON 28 APR 2006

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FILE 'LIFESCI' ENTERED AT 09:06:28 ON 28 APR 2006 COPYRIGHT (C) 2006 Cambridge Scientific Abstracts (CSA)

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=> s metA

L1 117810 META

=> s coryneform

L2 5918 CORYNEFORM

=> s 11 and 12

L3 16 L1 AND L2

ANSWER 1 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2006:148971 CAPLUS DOCUMENT NUMBER: 144:231584 Production of L-cysteine or L-methione by genetically TITLE: engineered strains of Corynebacterium glutamicum Sauer, Uwe; Mampel, Joerg; Schroeder, Hartwig; INVENTOR(S): Haefner, Stefan; Zelder, Oskar; Herold, Andrea; Klopprogge, Corinna BASF A.-G., Germany PATENT ASSIGNEE(S): Ger. Offen., 50 pp. SOURCE: CODEN: GWXXBX Patent DOCUMENT TYPE: German LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_\_ \_\_\_\_\_ ----\_\_\_\_\_ 20040720 DE 102004035052 A1 20060216 DE 2004-102004035052 WO 2006008152 A1 20060126 WO 2005-EP7925 20050720 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM DE 2004-102004035052A 20040720 PRIORITY APPLN. INFO.: The present invention provides strains of Corynebacterium glutamicum that are enhanced for the production of L-cysteine or L-methione. Specifically, the invention provides mutant strains of Corynebacterium glutamicum in which one or more transcription factor genes has been disrupted. ANSWER 2 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:1042417 CAPLUS 143:324892 DOCUMENT NUMBER: Process for the production of L-amino acids using TITLE: coryneform bacteria Bathe, Brigitte; Schischka, Natalie; Pfefferle, Walter INVENTOR(S): Degussa A.-G., Germany PATENT ASSIGNEE(S): PCT Int. Appl., 57 pp. SOURCE: CODEN: PIXXD2 Patent DOCUMENT TYPE: English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_\_\_ ---------WO 2005090589 A2 20050929 WO 2005090589 A3 20051201 20050311 WO 2005-EP2652 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 102004013503 A1 20051006 DE 2004-102004013503 20040318 PRIORITY APPLN. INFO.: DE 2004-102004013503A 20040318

AB The invention provides a process and engineered coryneform bacteria for the production of the desired L-amino acids L-methionine and L-lysine. In paticular the process comprises several steps:. Fermentation of a

coryneform bacterium producing the desired L-amino acid, in which at least one or more genes encoding transcription regulators smtB, cgl1, hspR, cgl2, cebR, cgl3, gatR, glcR, tcmR, smtB2, dtxR, degA, galR, tipA2, malI, cgl4, arsR, merR, hrcA, glpR2, lexA, ccpA3 and degA2, have been attenuated, excluded or expressed at a low level. Concentration of the desired L-amino acid in the medium or in the cells of the bacteria followed by the isolation of the L-amino acid. The invention also provides the use of bacteria in which further genes of the biosynthesis pathway of the desired L-amino acid are addnl. enhanced, or in which the metabolic pathways that reduce the formation of the desired L-amino acid are at least partially excluded.

L3 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:998620 CAPLUS

DOCUMENT NUMBER:

143:284832

TITLE:

Fermentative production of L-methionine using

recombinant microorganisms defective in methionine

uptake

PATENT ASSIGNEE(S):

Degussa A.-G., Germany Ger. Offen., 20 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
DE 102004009454	A1 20050915	DE 2004-102004009454	20040227			
WO 2005085463	A1 20050915	WO 2005-EP242	20050113			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,			
		IN, IS, JP, KE, KG, KP,				
		MD, MG, MK, MN, MW, MX,				
		RO, RU, SC, SD, SE, SG,				
SY, TJ, TM,	TN, TR, TT, TZ,	UA, UG, UZ, VC, VN, YU,	ZA, ZM, ZW			
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ, UG,	ZM, ZW, AM,			
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH, CY,	CZ, DE, DK,			
EE, ES, FI,	FR, GB, GR, HU,	IE, IS, IT, LT, LU, MC,	NL, PL, PT,			
		CF, CG, CI, CM, GA, GN,				
MR, NE, SN,	TD, TG					

PRIORITY APPLN. INFO.: DE 2004-102004009454A 20040227

AB A the invention provides recombinant microorganisms, preferably coryneform bacteria, for the fermentative production of L-amino acids, in particular L-methionine. In particular, a microorganism is selected in which one or more of the genes yaeC, abc, or yaeE coding for methionine uptake system MetD2 are attenuated.

L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:984087 CAPLUS

DOCUMENT NUMBER: 143:261392

TITLE: Method for producing L-amino acids with recombinant

coryneform bacteria having reduced

transcription factor AsuR activity

Koch, Daniel; Rueckert, Christian; Kalinowski, Joern; INVENTOR (S):

Puehler, Alfred; Bathe, Brigitte

PATENT ASSIGNEE(S): Degussa A.-G., Germany PCT Int. Appl., 48 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	ENT I	NO.			KINI	)	<b></b>									DATE				
	WO	2005	 0830:	82		A1		2005								20	0050	113			
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			CN.	CO.	CR.	CU.	CZ.	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,			
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ANSWER 5 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

2004:198192 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

140:248217

TITLE:

Fermentative production of L-methionine with

recombinant Coyrnebacterium glutamicum overexpressing

gene metF

Kroeger, Burkhard; Zelder, Oskar; Klopprogge, Corinna; INVENTOR(S):

Schroeder, Hartwig; Haefner, Stefan

PATENT ASSIGNEE(S):

BASF A.-G., Germany

SOURCE:

Ger. Offen., 97 pp.

DOCUMENT TYPE:

CODEN: GWXXBX

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	E APPLICAT	ION NO.	DATE				
DE 10239308	A1 2004	10311 DE 2002-	10239308	20020827				
WO 2004024931	A2 2004	10325 WO 2003-	EP9451	20030826				
WO 2004024931	A3 2004	10422						
W: AE. AG. AL.	AM, AT, AU,	AZ, BA, BB, BG,	BR, BY, BZ,	CA, CH, CN,				
CO, CR, CU,	CZ, DE, DK,	DM, DZ, EC, EE,	ES, FI, GB,	GD, GE, GH,				
		IS, JP, KE, KG,						
LS, LT, LU,	LV, MA, MD,	MG, MK, MN, MW,	MX, MZ, NI,	NO, NZ, OM,				
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TR, TT, TZ,	UA, UG, US,	, UZ, VC, VN, YU,	ZA, ZM, ZW					
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KG, KZ, MD,	RU, TJ, TM,	AT, BE, BG, CH,	CY, CZ, DE,	DK, EE, ES,				

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           BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                              20030826
                             20040430 AU 2003-258667
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    AU 2003258667
                                       EP 2003-794943
                                                              20030826
                             20050608
                        A2
    EP 1537223
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                      BR 2003-13760
                             20050712
    BR 2003013760
                       A
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                        T2
                                        JP 2004-535172
                             20051208
    JP 2005537023
                                                               20050225
                                         US 2005-525907
                       A1
                             20060330
    US 2006068476
                                         DE 2002-10239308
                                                           A 20020827
PRIORITY APPLN. INFO.:
                                                          W 20030826
                                         WO 2003-EP9451
    The invention provides a process for the fermentative production of
AΒ
    L-methionine bacteria, in which for a methylenetetrahydrofolate reductase
    metF gene coding nucleotide sequence is expressed. Numerous microbial
    sources for the metY gene, including bacteria, yeast and fungi, are
    claimed. In particular, the invention provides a recombinant strain of
    Corynebacterium glutamicum in which one or more of the following genes is
    overexpressed: lysC, gap, pgk, pyc, tpi, metA, metB, metC, glyA,
    metY, metH, serC, serB, cysE, and hom. Addnl. one or more of the
    following genes is attenuated: thrB, ilva, thrC, ddh, pck, pgi, poxB,
    dapA, dapB, lysA.
    ANSWER 6 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN
                       2004:198186 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                       140:248216
                       Fermentative production of L-methionine with
TITLE:
                       recombinant Coyrnebacterium glutamicum overexpressing
                       gene metA
                       Kroeger, Burkhard; Zelder, Oskar; Klopprogge, Corinna;
INVENTOR(S):
                       Schroeder, Hartwig; Haefner, Stefan
                       BASF A.-G., Germany
PATENT ASSIGNEE(S):
                       Ger. Offen., 96 pp.
SOURCE:
                       CODEN: GWXXBX
                       Patent
DOCUMENT TYPE:
                       German
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                       APPLICATION NO.
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                                         DE 2002-10239073
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                       A1 20040311
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                       A2 20040325
A3 20040422
                                         WO 2003-EP9452
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    WO 2004024932
     WO 2004024932
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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        EP 1537224
               R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
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        BR 2003013759
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        JP 2005537024
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        US 2006003425
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                                                                                                               A 20020826
                                                                            DE 2002-10239073
PRIORITY APPLN. INFO.:
                                                                            WO 2003-EP9452
                                                                                                               W 20030826
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AB The invention provides a process for the fermentative production of L-methionine bacteria, in which for a homoserine O-acetyltransferase

metA gene coding nucleotide sequence is expressed. Numerous microbial sources for the metY gene, including bacteria, yeast and fungi, are claimed. In particular, the invention provides a recombinant strain of Corynebacterium glutamicum in which one or more of the following genes is overexpressed: lysC, gap, pgk, pyc, tpi, metY, metB, metC, glyA, metF, metH, serC, serB, cysE, and hom. Addnl. one or more of the following genes is attenuated: thrB, ilva, thrC, ddh, pck, pgi, poxB, dapA, dapB, lysA.

L3 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:177945 CAPLUS

DOCUMENT NUMBER: 140:230550

TITLE: Fermentative production of L-methionine with

recombinant Coyrnebacterium glutamicum overexpressing

gene metY

INVENTOR(S): Kroeger, Burkhard; Zelder, Oskar; Klopprogge, Corinna;

Schroeder, Hartwig; Haefner, Stefan

PATENT ASSIGNEE(S): BASF A.-G., Germany SOURCE: Ger. Offen., 134 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.				KIND DATE								DATE				
WO	1023	0249	33		A2		2004	0325	I	DE 2	2002-1 2003-1	1023	9082		_	00208	_
WO	2004 W: RW:	AE, CO, GM, LS, PG, TR, GH, KG,	AG, CR, HR, LT, PH, TT, GM, KZ,	AL, CU, HU, LU, PL, TZ, KE, MD, GB,	AM, CZ, ID, LV, PT, UA, LS, RU, GR,	AT, DE, IL, MA, RO, UG, MW, TJ,	DK, IN, MD, RU, US, MZ, TM, IE,	AZ, DM, IS, MG, SC, UZ, SD, AT, IT,	DZ, JP, MK, SD, VC, SL, BE, LU,	EC, KE, MN, SE, VN, SZ, BG,	BG, EE, KG, MW, SG, YU, TZ, CH,	ES, KP, MX, SK, ZA, UG, CY, PT,	FI, KR, MZ, SL, ZM, ZM, CZ, RO,	GB, KZ, NI, SY, ZW, DE, SE,	GD, LC, NO, TJ, AM, DK, SI,	GE, LK, NZ, TM, AZ, EE, SK,	GH, LR, OM, TN, BY, ES, TR,
AU	2003						2004	0430		AU 2	, GW, 2003-:	2641	09		2	0030	
BR JP CN	2003 2005 1756 2005	AT, IE, 0137 5370 847 2607	BE, SI, 58 25	CH, LT,	DE, LV, A T2 A	DK, FI,	ES, RO, 2005 2005 2006	FR, MK, 0621 1208 0405	GB, CY,	GR AL	2003- , IT, , TR, 2003- 2004- 2003- 2005- 2002- 2003-	LI, BG, 1375 5351 8204 5257	LU, CZ, 8 74 52 10 9082	NL, EE,	SE, HU, 2 2 2 2 A 2	SK 0030 0030 0030 0050	PT, 826 826 826 224 826
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The invention provides a process for the fermentative production of L-methionine bacteria, in which for a O-acetyl-homoserine sulfhydrolase mety gene coding nucleotide sequence is expressed. Numerous microbial sources for the mety gene, including bacteria, yeast and fungi, are claimed. In particular, the invention provides a recombinant strain of Corynebacterium glutamicum in which one or more of the following genes is overexpressed: lysC, gap, pgk, pyc, tpi, metA, metB, metC, glyA, metF, metH, serC, serB, cysE, and hom. Addnl. one or more of the following genes is attenuated: thrB, ilva, thrC, ddh, pck, pgi, poxB, dapA, dapB, lysA.

L3 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:837302 CAPLUS

DOCUMENT NUMBER: 139:334001

TITLE: Methionine synthase genes and bacteria for

L-methionine production

INVENTOR(S): Kroeger, Burkhard; Zelder, Oskar; Klopprogge, Corinna;

Schroeder, Hartwig; Haefner, Stefan Basf Aktiengesellschaft, Germany

PATENT ASSIGNEE(S): Basf Aktiengesellschaft SOURCE: PCT Int. Appl., 304 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE						DATE				
	2003				A2	;									2	0030	116
. WO	2003								-	DD.	70.0	חח	DV	D.Z	CΛ	CH	CN
	W:	Æ,	AG,	АL,	AM,	AT,	AU,	AZ,	BA,	вв,	BG,	BR,	BI,	BZ,	CA,	Cn,	CIV,
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		BF.	BJ.	CF.	CG.	CI.	CM.	GA.	GN.	GO,	GW,	ML,	MR,	NE,	SN,	TD,	TG
DE	1021	7058		,	A1	,	2003	1127	•	DE 2	002-	1021	7058		2	0020	417
CZ	2481	761			AA		2003	1023		CA 2	003-	2481	761		2	0030	416
711	2003	2296	91		Δ1		2003	1027		AU 2	003-	2296	91		2	0030	416
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PRIORIT	Y APP	LN.	INFO	.:								1021					
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AB The invention relates to methods for L-methionine, by fermentation, using bacteria, in which a nucleotide sequence that codes for a methionine synthase (metF) (sic) gene is expressed.

L3 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:221847 CAPLUS

DOCUMENT NUMBER: 138:237017

TITLE: Methionine production by Corynebacterium glutamicum

with attenuated metK and brnQ genes

INVENTOR(S): Bathe, Brigitte; Pfefferle, Walter; Huthmacher, Klaus

PATENT ASSIGNEE(S): Degussa AG, Germany SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2003023044	A2 200303	20 WO 2002-EP9043	20020813			
WO 2003023044	A3 200308	<del></del>				
W: AE, AG, AL,	AM, AT, AU, A	Z, BA, BB, BG, BR, BY, BZ,	CA, CH, CN,			
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GM, HR, HU,	ID, IL, IN, I	S, JP, KE, KG, KP, KR, KZ,	LC, LK, LR,			
LS, LT, LU,	LV, MA, MD, M	G, MK, MN, MW, MX, MZ, NO,	NZ, OM, PH,			
PL, PT, RO,	RU, SD, SE, S	G, SI, SK, SL, TJ, TM, TN,	TR, TT, TZ,			
UA, UG, US,	UZ, VC, VN, Y	U, ZA, ZM, ZW				

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                         DE 2001-10144493
                                                                   20010911
                                20030703
     DE 10144493
                         A1
                                20040609
                                            EP 2002-760318
                                                                   20020813
                         A2
    EP 1425406
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                                              A 20010911
                                            DE 2001-10144493
PRIORITY APPLN. INFO.:
                                            WO 2002-EP9043
                                                                W 20020813
     A process and coryneform bacterium is provided for the production of
AΒ
     L-amino acids in which the following steps are carried out:. Fermentation of
     the coryneform bacteria producing the desired L-amino acid, in
     which at least the gene coding for S-adenosylmethionine synthetase (metK)
     and/or the gene coding for a for branched-chain amino acid transport
     protein (brnQ)is/are attenuated. Enrichment of the desired L-amino acid
     in the medium or in the bacterial cells, followed by isolation of the
     L-amino acid. In addition, expression of the genes in the biosynthetic
     pathway for the desired L-amino acid are enhanced, while at the same time
     genes that code for the biosynthesis of other amino acids are attenuated.
     In particular the process provides coryneform bacteria producing
     the desired L-amino acid, in which one or more of the following genes are
     overexpressed: lysC, gap, pyc, zwf, mqo, zwa1, tpi, pgk, hom, metA
     , metB, metE, metH, aecD, glyA, and metY. At the same time one or more of
     the following genes are are attenuated of eliminated: thrB, ilvA,
     thrC, ddh, ccpAl, pck, pgi, poxB, fba, and zwa2. In a preferred
     embodiment, Corynebacterium glutamicum strain ATCC 21608 is provided for
     the fermentative production of L-methionine.
     ANSWER 10 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN
                         2002:927599 CAPLUS
ACCESSION NUMBER:
                         138:12053
DOCUMENT NUMBER:
                         Cloning of Corynebacterium glutamicum metD gene
TITLE:
                         encoding a transcription repressor for L-methionine
                         biosynthesis enzymes and use thereof in related
                         fermentation
                         Rey, Daniel; Rueckert, Christian; Kalinowski, Joern;
INVENTOR(S):
                         Puehler, Alfred; Bathe, Brigitte; Huthmacher, Klaus;
                         Pfefferle, Walter
                         Degussa AG, Germany
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 52 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                         KIND
                                DATE
                                            APPLICATION NO.
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     PATENT NO.
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                                                                    20020510
     WO 2002097096
                                            WO 2002-EP5152
                          A2
                                20021205
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     WO 2002097096
                         A3
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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             UA, UG, UZ, VN, YU, ZA, ZM, ZW
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

DE 2001-10126164

EP 2002-740582

20010530

GN, GQ, GW, ML, MR, NE, SN, TD, TG

A1

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DE 10126164

EP 1390504

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IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      US 2003092026 A1 20030515 US 2002-156856 20020530 US 2005074802 A1 20050407 US 2004-936597 20040909 RITY APPLN. INFO.: DE 2001-10126164 A 20010530 WO 2002-EP5152 W 20020510 US 2002-156856 A3 20020530
PRIORITY APPLN. INFO.:
      The metD gene of Corynebacterium glutamicum ATCC13032 encoding a
AΒ
      transcription regulator with repression function for genes which are
      involved in L-amino acid biosyntheses, in particular the biosynthesis of
      L-methionine, are cloned. The expression vectors containing metD gene with
      deletion mutations are constructed for metD gene knockout or attenuation
      in the Corynebacteria, which improves the production of L-methionine in
fermentation
      Methods and culture media for fermentative preparation of L-methionine with
      recombinant bacterial strains transformed with these vectors are also
      provided. Transformation of gene metD expression vector
      pK18mobsacBmetDdel into a Corynebacterium host increase the L-methionine
      production yield from 3 g methionine/L at 12.2 OD660 to 20 g methionine/L at
      14.8 OD660. The fermentatively prepared L-methionine can be used as animal
      feedstuff additive.
      ANSWER 11 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN
                                 2002:172115 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                                 136:231338
                                 Sequences of metY gene from corynebacteria and use
TITLE:
                                 thereof in production of L-lysine or L-methionine
                                 Moeckel, Bettina; Pfefferle, Walter; Huthmacher,
INVENTOR(S):
                                 Klaus; Rueckert, Christian; Kalinowski, Joern;
                                 Puehler, Alfred; Binder, Michael; Greissinger, Dieter;
                                 Thierbach, Georg
                                 Degussa A.-G., Germany
PATENT ASSIGNEE(S):
                                 PCT Int. Appl., 57 pp.
SOURCE:
                                 CODEN: PIXXD2
                                 Patent
DOCUMENT TYPE:
                                 English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                          KIND DATE APPLICATION NO. DATE
       PATENT NO.
      WO 2002018613 A1 20020307 WO 2001-EP8223
           2002018613

A1 20020307 WO 2001-EP8223 20010717

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                           A1 20020314 DE 2001-10109690
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                                                                                         20010717
                                                          AU 2001-89666
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            2001089666 A5 20020313 AU 2001-89666 20010717
1313871 A1 20030528 EP 2001-969400 20010717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
       EP 1313871
       US 2002110878 A1 20020815
US 6812016 B2 20041102
                                                          US 2001-919932
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       US 2005064551
                                                           US 2004-838245
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                                                           DE 2000-10043334 A 20000902
DE 2001-10109690 A 20010228
PRIORITY APPLN. INFO.:
                                                           US 2001-294252P
                                                                                    P 20010531
                                                                                    W 20010717
                                                           WO 2001-EP8223
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homoserine sulfhydrylase is cloned for use in increasing the efficiency of fermentation of L-lysine or L-methionine by coryneform bacteria. Methods and culture media for fermentative preparation of L-lysine or L-methionine with recombinant bacterial strains transformed with these vectors are also provided. Enhancement of the metY gene expression by metY shuttle vector increased the yield of L-lysine in a Corynebacterium host from 15.7 g lysine/L at 10.6 OD660 to 16.1 g lysine/L at 9.5 OD660 and L-methionine in a Corynebacterium host from 1.4 g methionine/L at 6.6 OD660 to 16.0 g methionine/L at 8.3 OD660. The fermentatively prepared L-methionine are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN L<sub>3</sub>

2002:171942 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:231333

Sequences of metR and metZ gene from corynebacteria TITLE:

and use thereof in synthesis of L-methionine

Bathe, Brigitte; Pfefferle, Walter; Huthmacher, Klaus; INVENTOR(S):

Rueckert, Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael; Greissinger, Dieter;

Thierbach, Georg

Degussa A.-G., Germany PATENT ASSIGNEE(S): PCT Int. Appl., 51 pp. SOURCE:

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.								7				DATE				
WO	2002 2002 2002	0184 0184	3 0 3 0		A2 A3		2002	0704	,				20010717				
WO	W:	AE, CO, GM, LS,	AG, CR, HR, LT,	AL, CU, HU, LU,	AM, CZ, ID, LV,	AT, DE, IL, MA,	AU, DK, IN, MD,	AZ, DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,
	RW:	VN, GH, KZ, IE,	YU, GM, MD, IT,	ZA, KE, RU, LU,	ZW LS, TJ, MC,	MW, TM, NL,	AT, PT,	SD, BE, SE,	SL, CH, TR,	SZ, CY,	TZ, DE,	UG, DK,	ZW, ES,	AM, FI,	AZ, FR,	BY,	KG, GR,
AU	1010 2001 1313	9688 0819	84		A1 A5		2002	0314 0313	1	AU 2	001-	8198	4		2	0010	717
US	R: 2002	AT, IE, 1026	BE, SI, 64	CH, LT,	DE, LV, Al	DK, FI,	ES, RO, 2002	FR, MK, 0801	GB, CY,	GR, AL,	IT, TR	LI,	LU,	NL,	SE,	MC,	PT,
US PRIORIT	6815 Y APP						2004	1109		DE 2 US 2	000- 001- 001-	1010 2942	9688 24P	•	A 2 P 2	0000 0010 0010 0010	228 531

The metR and metZ genes of Corynebacterium glutamicum ATCC13032 encoding AB transcription activator and O-succinyl homoserine sulfhydrylase, resp., are cloned for use in increasing the efficiency of fermentation of L-methionine by coryneform bacteria. Methods and culture media for fermentative preparation of L-methionine with recombinant bacterial strains transformed with these vectors are also provided. Deletion of the metR and metZ genes by integration mutagenesis using metR and metZ exchange

vector increased the yield of methionine in a Corynebacterium host from 1.5 g methionine/L at 11.3 OD660 to 9.4 g methionine/L at 12.0 OD660. The fermentatively prepared L-methionine are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

ANSWER 13 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

2002:107385 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:149989

The metH gene of Corynebacterium glutamicum encoding TITLE:

homocysteine methyltransferase II and its use in increasing yields of L-methionine in fermentation

Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter; INVENTOR(S): Huthmacher, Klaus; Rueckert, Christian; Kalinowski,

Joern; Puehler, Alfred; Binder, Michael; Greissinger,

Dieter; Thierbach, Georg Degussa A.-G., Germany

PATENT ASSIGNEE(S): PCT Int. Appl., 53 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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		вJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	, ML,	MR,	ΝE,	SN,	TD,	TG		
DE	1010	9687	•		Al		2002	0221		DE 2	2001-	1010	9687		2	0010	228	
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US	2005	2333	73		Al		2005	1020		US 2	2005-	1556	56		2	0050	620	
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										DE 2	2001-	1010	9687		A 2	0010	228	
										US 2	2001-	2942	51P		P 2	0010	531	
										WO 2	2001-	EP82	20	,	W 2	0010	717	
										US 3	2001-	9198	91		A3 2	0010	802	
	WO DE EP US US US	WO 2002 W: RW: DE 1010 EP 1307 R: US 2002 US 6958 US 2005	WO 200201020 W: AE, CO, GM, LS, RO, VN, RW: GH, DE, BJ, DE 10109687 EP 1307475 R: AT, IE, US 20020487 US 6958228 US 20052333	WO 2002010209 W: AE, AG, CO, CR, GM, HR, LS, LT, RO, RU, VN, YU, RW: GH, GM, DE, DK, BJ, CF, DE 10109687 EP 1307475 R: AT, BE, IE, SI, US 2002048793 US 6958228 US 2005233373 RITY APPLN. INFO	WO 2002010209  W: AE, AG, AL,  CO, CR, CU,  GM, HR, HU,  LS, LT, LU,  RO, RU, SD,  VN, YU, ZA,  RW: GH, GM, KE,  DE, DK, ES,  BJ, CF, CG,  DE 10109687  EP 1307475  R: AT, BE, CH,  IE, SI, LT,  US 2002048793  US 6958228  US 2005233373  RITY APPLN. INFO.:	WO 2002010209 A1  W: AE, AG, AL, AM,  CO, CR, CU, CZ,  GM, HR, HU, ID,  LS, LT, LU, LV,  RO, RU, SD, SE,  VN, YU, ZA, ZW,  RW: GH, GM, KE, LS,  DE, DK, ES, FI,  BJ, CF, CG, CI,  BJ, CF, CG, CI,  A1  EP 1307475 A1  R: AT, BE, CH, DE,  IE, SI, LT, LV,  US 2002048793 A1  US 6958228 B2  US 2005233373 A1  RITY APPLN. INFO.:	WO 2002010209 A1  W: AE, AG, AL, AM, AT, CO, CR, CU, CZ, DE, GM, HR, HU, ID, IL, LS, LT, LU, LV, MA, RO, RU, SD, SE, SG, VN, YU, ZA, ZW, AM, RW: GH, GM, KE, LS, MW, DE, DK, ES, FI, FR, BJ, CF, CG, CI, CM, EP 1307475 A1 R: AT, BE, CH, DE, DK, IE, SI, LT, LV, FI, US 2002048793 A1 US 6958228 B2 US 2005233373 A1 RITY APPLN. INFO.:	WO 2002010209 A1 2002  W: AE, AG, AL, AM, AT, AU,  CO, CR, CU, CZ, DE, DK,  GM, HR, HU, ID, IL, IN,  LS, LT, LU, LV, MA, MD,  RO, RU, SD, SE, SG, SI,  VN, YU, ZA, ZW, AM, AZ,  RW: GH, GM, KE, LS, MW, MZ,  DE, DK, ES, FI, FR, GB,  BJ, CF, CG, CI, CM, GA,  DE 10109687 A1 2002  EP 1307475 A1 2003  R: AT, BE, CH, DE, DK, ES,  IE, SI, LT, LV, FI, RO,  US 2002048793 A1 2002  US 6958228 B2 2005  RITY APPLN. INFO.:	WO 2002010209 A1 20020207  W: AE, AG, AL, AM, AT, AU, AZ,  CO, CR, CU, CZ, DE, DK, DM,  GM, HR, HU, ID, IL, IN, IS,  LS, LT, LU, LV, MA, MD, MG,  RO, RU, SD, SE, SG, SI, SK,  VN, YU, ZA, ZW, AM, AZ, BY,  RW: GH, GM, KE, LS, MW, MZ, SD,  DE, DK, ES, FI, FR, GB, GR,  BJ, CF, CG, CI, CM, GA, GN,  DE 10109687 A1 20020221  EP 1307475 A1 20030507  R: AT, BE, CH, DE, DK, ES, FR,  IE, SI, LT, LV, FI, RO, MK,  US 2002048793 A1 20020425  US 6958228 B2 20051025  RITY APPLN. INFO.:	WO 2002010209 Al 20020207  W: AE, AG, AL, AM, AT, AU, AZ, BA, CO, CR, CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, JP, LS, LT, LU, LV, MA, MD, MG, MK, RO, RU, SD, SE, SG, SI, SK, SL, VN, YU, ZA, ZW, AM, AZ, BY, KG, RW: GH, GM, KE, LS, MW, MZ, SD, SL, DE, DK, ES, FI, FR, GB, GR, IE, BJ, CF, CG, CI, CM, GA, GN, GQ, DE 10109687  R: AT, BE, CH, DE, DK, ES, FR, GB, IE, SI, LT, LV, FI, RO, MK, CY, US 2002048793  US 6958228  US 2005233373  RITY APPLN. INFO.:	WO 2002010209 A1 20020207 WO 2  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GM, HR, HU, ID, IL, IN, IS, JP, KE, LS, LT, LU, LV, MA, MD, MG, MK, MN, RO, RU, SD, SE, SG, SI, SK, SL, TJ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, DE, DK, ES, FI, FR, GB, GR, IE, IT, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, DE 10109687 A1 20020221 DE 2  EP 1307475 A1 20030507 EP 2  EP 1307475 A1 20030507 EP 2  US 2002048793 A1 20020425 US 2  US 2005233373 A1 20051020 US 2  RITY APPLN. INFO.:  DE : US	WO 2002010209 Al 20020207 WO 2001-1  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,  CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,  GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ,  DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  DE 10109687 Al 20020221 DE 2001-  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT,  IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  US 2002048793 Al 20020425 US 2001-  US 2005-  US 2005-  RITY APPLN. INFO.:  DE 2001-  WO 2001-  WO 2001-  US 2001-	WO 2002010209 A1 20020207 WO 2001-EP822  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, DE 10109687 A1 20020221 DE 2001-1010 EP 1307475 A1 20030507 EP 2001-9651 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2002048793 A1 20020425 US 2001-9198 US 6958228 B2 20051025 US 2005233373 A1 20051020 US 2005-1556 RITY APPLN. INFO.:  DE 2000-1003 DE 2001-2942 WO 2001-EP82 US 2001-9198	WO 2002010209 A1 20020207 WO 2001-EP8220  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, DE 10109687 A1 20020221 DE 2001-10109687 EP 1307475 A1 20030507 EP 2001-965135 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2002048793 A1 20020425 US 2005233373 A1 20051020 US 2001-919891  RITY APPLN. 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INFO:  B2 2001-10109687  A1 20020425  US 2001-294251P  WO 2001-EP8220 US 2001-919891	WO 2002010209 A1 20020207 WO 2001-EP8220 2  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, DE 10109687 A1 20020221 DE 2001-10109687 2  EP 1307475 A1 20030507 EP 2001-965135 2  ER: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  US 2002048793 A1 20020425 US 2001-919891 2  US 6958228 B2 20051025  US 2005233373 A1 20051020 US 2005-155656 2  US 2005-155656 A2  US 2001-294251P P 2  WO 2001-EP8220 W 2  US 2001-919891 A3 2	WO 2002010209 A1 20020207 WO 2001-EP8220 20010  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  DE 10109687 A1 20020221 DE 2001-10109687 20010  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  US 2002048793 A1 20020425 US 2001-919891 20010  US 6958228 B2 20051025  US 2005233373 A1 20051020 US 2005-155656 20050  RITTY APPLN. INFO.:  DE 2001-10109687 A 20010  DE 2001-10109687 A 20010	

The metH gene of Corynebacterium glutamicum ATCC13032 encoding methylene AΒ tetrahydrofolate reductase is cloned for use in increasing the efficiency of fermentation of L-methionine by coryneform bacteria. The expression vectors containing metH gene and metA and metY gene are constructed. Methods and culture media for fermentative preparation of L-methionine with recombinant bacterial strains transformed with these vectors are also provided. Transformation of gene metH expression vector pCREmetH into a Corynebacterium host increase the L-methionine production yield from 1.4 g methionine/L at 12.3 OD660 to 5.3 g methionine/L at 14.3 OD660. The fermentatively prepared L-methionine are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN 1.3 2002:107384 CAPLUS ACCESSION NUMBER:

136:149988 DOCUMENT NUMBER:

The metE gene of Corynebacterium glutamicum encoding TITLE:

homocysteine methyltransferase I and its use in increasing yields of L-methionine in fermentation Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter;

Huthmacher, Klaus; Rueckert, Christian; Kalinowski, Joern; Puehler, Alfred; Binder, Michael; Greissinger,

> Dieter; Thierbach, Georg Degussa A.-G., Germany

PATENT ASSIGNEE(S): PCT Int. Appl., 62 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PAT						KIND DATE				APPLICATION NO.						DATE				
WO	2002	0102	08					0207	,		2001-1		19		2	0010	717			
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒŻ,	CA,	CH,	CN,			
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,			
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,			
											MW,									
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	ΤŻ,	UA,	UG,	UZ,			
			YU,																	
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪG,	ZW,	AT,	BE,	CH,	CY,			
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,			
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									US 2001-919835					A3 20010802						

The metE gene of Corynebacterium glutamicum ATCC13032 encoding AB homocysteine methyltransferase I is cloned for use in increasing the efficiency of fermentation of L-methionine by coryneform bacteria. The expression vectors containing metE gene and metA and metY gene are constructed. Methods and culture media for fermentative preparation of L-methionine with recombinant bacterial strains transformed with these vectors are also provided. The fermentatively prepared L-methionine are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 7 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 15 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN L3

ACCESSION NUMBER: 2002:107382 CAPLUS

136:149987 DOCUMENT NUMBER:

The metF gene of Corynebacterium glutamicum encoding TITLE:

methylenetetrahydrofolate reductase and its use in increasing yields of L-methionine in fermentation Bathe, Brigitte; Moeckel, Bettina; Pfefferle, Walter;

INVENTOR(S): Huthmacher, Klaus; Binder, Michael; Greissinger,

Dieter; Thierbach, Georg

PATENT ASSIGNEE(S): Degussa A.-G., Germany

PCT Int. Appl., 43 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE				APPL	ICAT:	ION I	NO.	DATE				
	2002	0102	06		A2 20020207 A3 20020502			Ţ	WO 2	001-	EP82	24		20010717				
0	W :	AE, CO, GM, LS, RO, VN, GH, DE,	AG, CR, HR, LT, RU, YU, GM, DK,	AL, CU, HU, LU, SD, ZA, KE, ES,	AM, CZ, ID, LV, SE, ZW, LS, FI,	AT, DE, IL, MA, SG, AM, MW, FR,	AU, DK, IN, MD, SI, AZ, MZ, GB,	AZ, DM, IS, MG, SK, BY, SD, GR,	DZ, JP, MK, SL, KG, SL, IE,	EC, KE, MN, TJ, KZ, SZ, IT,	BG, EE, KG, MW, TM, MD, TZ, LU, ML,	ES, KP, MX, TR, RU, UG, MC,	FI, KR, MZ, TT, TJ, ZW, NL,	GB, KZ, NO, TZ, TM AT, PT,	GD, LC, NZ, UA, BE, SE,	GE, LK, PL, UG, CH, TR,	GH, LR, PT, UZ,	
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ш	R: 2002	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,						MC,		
PRIORIT			INFO	.:						DE 2 DE 2 US 2 WO 2	000- 001- 001-	1005 1010 2942 EP82	3942 9686 79P 24	; ; ;	A 2 A 2 P 2 W 2	0000 0010 0010 0010	802 228 531	

The metF gene of Corynebacterium glutamicum ATCC13032 encoding methylene tetrahydrofolate reductase is cloned for use in increasing the efficiency of fermentation of L-methionine by coryneform bacteria. The expression vectors containing metF gene and metA and metY gene are constructed. Methods and culture media for fermentative preparation of L-methionine with recombinant bacterial strains transformed with these vectors are also provided. Transformation of gene metF expression vector pCREmetF into a Corynebacterium host increase the L-methionine production yield from 1.4 g methionine/L at 10.3 OD660 to 7.3 g methionine/L at 11.2 OD660. The fermentatively prepared L-methionine are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

L3 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:65385 CAPLUS

DOCUMENT NUMBER: 96:65385

TITLE: Bacterial catabolism of isophthalate and terephthalate

AUTHOR(S): Elmorsi, Elmorsi A.; Hopper, David J.

CORPORATE SOURCE: Dep. Agric. Chem., Elminya Univ., Elminya, Egypt SOURCE: Biochemical Society Transactions (1981), 9(5), 431

CODEN: BCSTB5; ISSN: 0300-5127

DOCUMENT TYPE: Journal LANGUAGE: English

AP seudomonas species isolated from soil grew on either isophthalate (I) or terephthalate (II) as C source, whereas a Gram-pos. coryneform bacterium isolated from soil grew only on I. For both organisms, protocatechuate (III) appeared to be the ring-fission substrate in the degradative pathways for these acids, meta and ortho fission occurring in the Pseudomonas and Gram-pos. organisms, resp. The Gram-pos. organism readily oxidized III when grown on I, and crude cell exts. oxidized both I and III in the presence of an NADPH-generating system. The Pseudomonas species readily oxidized III, but not II, when grown on I; II-grown cells oxidized II but not I.